



## BUILDING NOTE

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### BCA Energy Efficiency Provisions

From 1 January 2003 (amendment 12) mandatory energy efficiency provisions will be adopted into the Building Code of Australia (BCA) and will apply in The Northern Territory.

The new Energy efficiency provisions will apply to:

- Class 1 buildings (houses)
- Class 10 buildings (non habitable) with a *conditioned space*

Territory legislation is such that any new works, which requires a building permit will need to comply with the new requirements. These provisions are not retrospective.

#### **APPLICATION OF PROVISIONS TO PERMITS ISSUED AND DESIGNS COMMENCED PRIOR TO ADOPTION OF THE AMENDMENT ON 1 JANUARY 2003.**

Section 51 of the *NT Building Act 1993* provides for application of new regulations. In summary the section states that new provisions of the BCA do not apply if-

- The permit is granted before the provision is adopted ; or
- The Building Certifier, certifies in writing that substantial progress was made on the design before the provision was adopted.

Nevertheless the Building Certifier and owner may agree that the new energy provisions of the BCA will apply.

In determining compliance the Building Certifier could simply require an owner to submit evidence that the design was substantially started or completed prior to 1 January 2003. This evidence could be in the form of a statement in writing and signed by the owner. In addition, so that owners are aware of the issue, it would be appropriate for the statement to acknowledge that the proposed building work does not include energy provisions as specified in the BCA.

#### **APPLICATION OF THE PROVISIONS**

As with all building applications there are two options for assessing applications for compliance with the BCA energy efficiency provisions.

- Deemed to Satisfy – assessing compliance with the acceptable construction provisions; or
- Assessing compliance of an alternative solution against the performance requirements

It would be assumed that for the most part applicants would be seeking assessment against the Deemed to Satisfy provisions unless otherwise specified.

If an owner wishes to go down the alternative solution path suitable evidence and documentation will need to be provided to demonstrate that the solution complies with the performance requirements. This documentation will need to be based on BCA 96 assessment methods.

Building Certifiers and applicants have the ability to refer alternative solutions to the Buildings Appeals Board who will provide an assessment/referral service in relation to the methodology used to determine as to whether the alternative solution complies with the performance requirements of the code.

Applications for referral on alternative solutions cannot be considered unless accompanied by a full assessment in accordance with the BCA.

## **VERIFICATION METHODS**

Whilst the BCA has two verification methods, Verification V2.6.2.1 using stated value is not applicable in the NT. This action was taken on the basis that software packages do not, at this stage, adequately model natural ventilated or free running houses.

The second allowable verification method V2.6.2.2 using a reference building requires the evaluation of the proposed design compared against a reference house. The method involves doing two energy evaluations.

## **APPLICATION OF PROVISIONS TO ALTERATIONS, ADDITIONS AND EXTENSIONS TO EXISTING BUILDINGS**

From 1 January 2003 (amendment 12) mandatory energy efficiency provisions will be adopted into the Building Code of Australia (BCA) and will apply in The Northern Territory. The provisions are applicable to new houses, conditioned outbuildings as well as alterations, additions and extensions to existing buildings.

Building Certifiers commonly deal with permit applications that are for parts of a building (additions and extensions) and interpreting compliance of that part of the building with the BCA. This process should be no different when considering additions and extensions in relation to compliance with the energy efficiency provisions.

The Building Certifier in determining the degree of compliance needs to consider the appropriateness of each criteria to the particular case. Any decision made under this context can extend to not requiring a particular level of a performance to be achieved, if that is the appropriate action to be taken.

There will be instances when it is not practicable or appropriate for the energy efficiency provisions to be applied to other alterations that are not additions or extensions. (For example the replacing or changing of a window.)

It is not possible to include all situations that might have to be considered by Building Certifiers in the future. Nevertheless the following situations are provided as a general guide.

The ultimate decision on all situations, however, rests with the relevant Building certifier in determining compliance.

### **New habitable room addition to an existing class 1 dwelling**

Compliance of new work with all measures.

Effective glazing area and shading requirements for new windows forming part of addition should be calculated proportionately to the new works.

### **Extension to an existing habitable room in existing class 1**

Compliance of new work with all measures. Effective glazing area and shading requirements for new windows forming part of addition should be calculated proportionately to the new works.

### **Conversion of a Class 10 to a Class 1**

Compliance with all measures

### **Non habitable room addition and extensions**

Services, if provided, to comply

### **Replacement Works**

Replacement of roof cladding would not be expected to invoke energy efficiency measures for the roof although if original approval required light coloured roofing then this must be maintained.

Replacement of windows is not generally expected to require consideration of shading or ventilation. A new window increasing/decreasing the size of an existing opening should require consideration of shading.

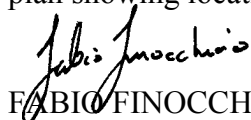
## **DOCUMENTATION**

Building permits must include full details showing how the building will comply with the energy efficiency provisions. The energy efficiency details will need to be shown on or specified in the documents submitted to the Building Certifier.

Approved Plans will need to specify actual details of the various components. Generic reference is not acceptable.

A schedule should be used for evidencing such things as glazing ratio, ventilation ratios and shading protection.

A table should be used for evidencing requirements dealing with the building fabric supplemented with drawing references eg. Ventilation opening areas on table should reference plan showing location/distribution.



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